

Claims

1. Method for determining a perceived quality indicator for end-to-end data transfer in a wireless data network (1), comprising
measuring at least one system performance indicator during transfer of a
5 predefined data type specimen, and
calculating the perceived quality indicator for said predefined data transfer type
and for at least one other data transfer type from said measurement.
2. Method according to claim 1, in which the at least one system
10 performance indicator comprises at least one lower network layer performance
indicator further comprising
measuring at least one other lower network layer performance indicator
and
mapping the at least one other lower network layer performance
15 indicator to the perceived quality indicator.
3. Method according to claim 2, in which the mapping is a linear
mapping, e.g. a linear two-dimensional mapping.
- 20 4. Method according to claim 2 or 3, in which the at least one lower
network layer performance indicator is a modified lower network layer
performance indicator.
- 25 5. Method according to claim 4, in which integer values of the at least
one lower network layer performance indicator are mapped to real values.
- 30 6. Method according to one of the claims 1 through 5, in which the at
least one lower network layer performance indicator is the throughput speed,
and the quality indicator is derived from the measured throughput speed using
a moving window averaging estimation, in which the size of the moving window

corresponds to the at least one other data transfer type.

7. Method according to one of the claims 2 through 6, in which a final quality indicator is calculated from the percentage increase in the quality indicator for the at least one other data transfer type.

8. Method according to one of the claims 2 through 7, in which the method further comprises the step of analysing the contribution of each of the at least one lower network layer performance indicator.

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9. Method according to one of the claims 1 through 8, in which the predefined data transfer type specimen is a FTP download of a large size data file, e.g. 512 kByte.

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10. Measurement system for determining a quality indicator for end-to-end data transfer in a wireless data network (1), comprising a data network analysis system (10) connected to the wireless data network (1) for measuring at least one lower network layer performance indicator using a predefined data transfer specimen,

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in which the measurement system (10) is further equipped with processing means (2) which are arranged for deriving the perceived quality indicator for at least one other data transfer type from the at least one lower network layer performance indicator.

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11. Measurement system according to claim 10, in which the processing means (2) are arranged to execute the method according to one of the claims 2 through 9.